DBMS LAB – week 8

Python – MySQL

Create Database::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd=""  
)  
# print(db)  
  
query = "CREATE DATABASE IF NOT EXISTS storehouse"  
cmd = db.cursor()  
cmd.execute(query)

Graphical user interface, text, application

Description automatically generated

Create Table::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
  
query = "CREATE TABLE IF NOT EXISTS products (" \  
 "prod\_id INT PRIMARY KEY," \  
 "prod\_name VARCHAR(255) NOT NULL," \  
 "category VARCHAR(50) NOT NULL," \  
 "quantity INT DEFAULT 0," \  
 "price FLOAT NOT NULL," \  
 "discount FLOAT DEFAULT 0," \  
 "date\_of\_manufacture DATE NOT NULL," \  
 "date\_of\_expiry DATE NOT NULL)"  
cmd = db.cursor()  
cmd.execute(query)

(After inserting few values)

Graphical user interface, application

Description automatically generated

Insert::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
# 2 namae properNoun 4 1444.0 .14 2020-02-04 2020-02-05  
# 3 honey food 40 300.00 .10 2020-06-06 2030-06-06  
  
query = "INSERT INTO products VALUES (%s, %s, %s, %s, %s, %s, %s, %s);"  
value = (input("Enter prod\_id, name, category, quantity, price, discount, dom, doe in order with spaces::\n").split())  
cmd = db.cursor()  
cmd.execute(query, value)  
  
db.commit()  
print(cmd.rowcount, "rows inserted")  
# print(query % value)

Text

Description automatically generated

Find::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
# 1 namae properNoun 4 1444.0 .14 2020-02-02 2020-02-03  
  
query = "SELECT \* FROM products WHERE `prod\_name` = '%s'"  
value = (input("Enter name of the product::\n"))  
cmd = db.cursor()  
cmd.execute(query % value)  
  
records = cmd.fetchall()  
for record in records:  
 print(record)  
print(cmd.rowcount, "rows hit")  
# print((query % value == "SELECT \* FROM products WHERE `prod\_name` = 'namae'"))

Text

Description automatically generated

Seach\_in\_category::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
# 1 namae properNoun 4 1444.0 .14 2020-02-02 2020-02-03  
  
query = "SELECT \* FROM products WHERE `category` = '%s'"  
value = (input("Enter category of the product(s)::\n"))  
cmd = db.cursor()  
cmd.execute(query % value)  
  
records = cmd.fetchall()  
for record in records:  
 print(record)  
print(cmd.rowcount, "rows hit")  
# print((query % value == "SELECT \* FROM products WHERE `prod\_name` = 'namae'"))

Text

Description automatically generated

Update::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
# 1 namae properNoun 4 1444.0 .14 2020-02-02 2020-02-03  
  
query = "UPDATE `products` SET `price` = %s WHERE `prod\_id` = %s"  
value = (input("Enter the ID, new\_price of the product::\n").split())  
cmd = db.cursor()  
cmd.execute(query % (float(value[1]), int(value[0])))  
  
db.commit()  
  
cmd.execute("SELECT \* FROM products")  
records = cmd.fetchall()  
for record in records:  
 print(record)  
print(cmd.rowcount, "rows hit")  
# print((query % value == "SELECT \* FROM products WHERE `prod\_name` = 'namae'"))

Text

Description automatically generated

Provide\_Discount::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
# 1 namae properNoun 4 1444.0 .14 2020-02-02 2020-02-03  
  
query = "SELECT discount FROM products WHERE `category` = '%s'"  
value = (input("Enter category of the product(s)::\n"))  
cmd = db.cursor()  
cmd.execute(query % value)  
  
records = cmd.fetchall()  
for record in records:  
 print(record)  
print(cmd.rowcount, "rows hit")  
# print((query % value == "SELECT \* FROM products WHERE `prod\_name` = 'namae'"))

Text

Description automatically generated

Delete::

import mysql.connector as mysql\_client  
from datetime import date  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
# 1 namae properNoun 4 1444.0 .14 2020-02-02 2020-02-03  
  
query = "DELETE FROM products WHERE `date\_of\_expiry` < '%s'"  
# value = (input("Enter DoE of the product::\n"))  
cmd = db.cursor()  
query\_ = "SELECT \* FROM products"  
cmd.execute(query % date.today().strftime("%Y-%m-%d")) # date.today().strftime("%Y-%m-%d"))  
  
db.commit()  
  
cmd.execute(query\_)  
records = cmd.fetchall()  
for record in records:  
 print(record)  
print(cmd.rowcount, "rows hit")  
# print((query % value == "SELECT \* FROM products WHERE `prod\_name` = 'namae'"))

(Displaying Table)

Text

Description automatically generated

Notification\_Free Shipping::

import mysql.connector as mysql\_client  
  
db = mysql\_client.connect(  
 host="localhost",  
 user="root",  
 passwd="",  
 database="storehouse"  
)  
# print(db)  
# 1 namae properNoun 4 1444.0 .14 2020-02-02 2020-02-03  
  
query = "SELECT price, discount FROM products"  
# value = (input("Enter category of the product(s)::\n"))  
cmd = db.cursor()  
cmd.execute(query)  
  
records = cmd.fetchall()  
for record in records:  
 print("Free shipping" if record[0]\*(1-record[1]) > 1000.00 else "Shipping charges not included")  
 # print(record[0] \* (1 - record[1]))  
print(cmd.rowcount, "rows hit")  
# print((query % value == "SELECT \* FROM products WHERE `prod\_name` = 'namae'"))  
cmd.close()  
db.close()

(After some Table rows are deleted)

Text

Description automatically generated